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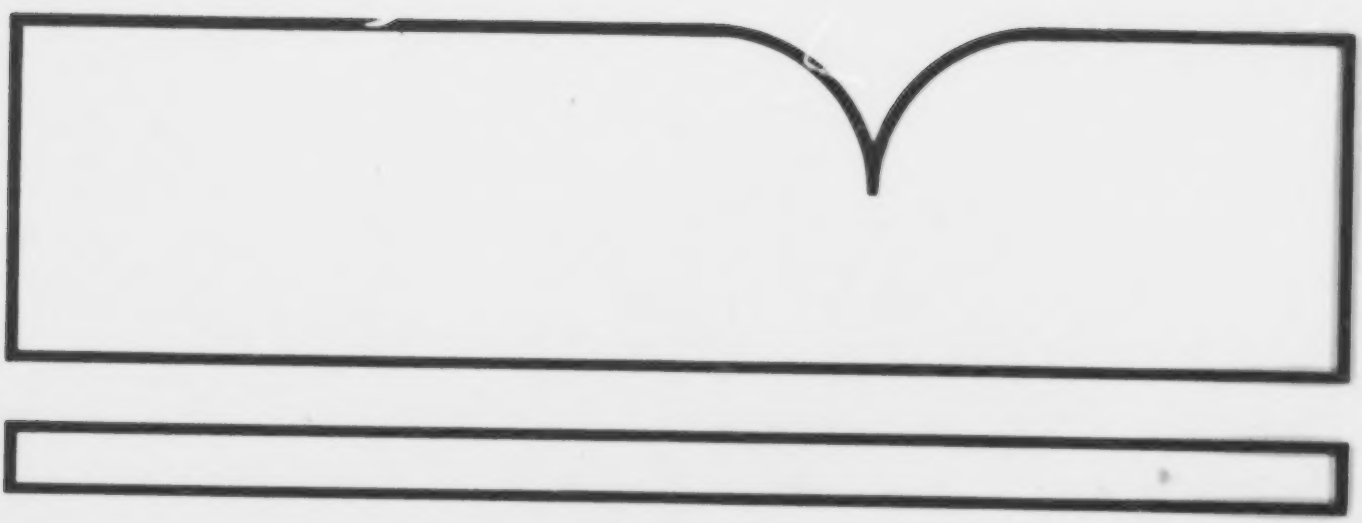

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This document presents the Proceedings of the first Ad Hoc International Meeting of Regulatory Officials on Alignment of Noise Test Procedures. The Ad Hoc Meeting was held in Washington, D.C. on December 9-12, 1980. The Proceedings describes the history and rationale of the Meeting, presents the Meeting conclusions, details the Meeting agenda, lists the participants, and summarizes the presentations made at the Meeting and the ensuing discussions.

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ORIGINAL ENGLISH

PROCEEDINGS OF THE AD HOC INTERNATIONAL MEETING OF REGULATORY OFFICIALS ON ALIGNMENT OF NOISE TEST PROCEDURES

ORIGINAL ENGLISH

FOREWORD

These Proceedings were prepared by the U.S. Environmental Protection Agency, who served as Secretariat and host for the first Ad Hoc International Meeting of Regulatory Officials on Alignment of Noise Test Procedures held in Washington, D.C., December 9-12, 1980.

The Commission of European Communities has offered to serve as the Secretariat for a subsequent Ad Hoc Meeting to be held in 1982.

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RECEIPT OF COMMENTS ON DRAFT PROCEEDINGS

This document reflects comments and changes received by the Secretariat from participants by September 25, 1981. The Secretariat, therefore, assumes that if a participant had not responded by September 25, no changes were desired.

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INTRODUCTION

In May of 1980, the Organization for Economic Cooperation and Development (OECD) held a Conference on noise in Paris. This Conference was the first international meeting ever held on noise abatement policy.

The aim of the OECD Conference was to evaluate noise abatement policies currently in force in OECD member countries and to propose more effective measures for a quieter future. Delegates were unanimous in agreeing that a more stringent approach was urgently needed to reverse the current trend toward an ever noisier environment.

Among other conclusions concerning noise from motor vehicles and other sources, the Conference recommended a new effort in the international harmonization of noise measurement procedures that are used for regulatory purposes.

A principal motivation for alignment of noise test procedures is, on the one hand, to ensure that commercial constraints do not constitute an obstacle to the improvement of the environment and, on the other hand, to avoid distortions of competition and non-tariff barriers to trade.

The United States proposed at the OECD meeting that officials who had policy responsibility for adoption of appropriate noise measurement procedures for regulatory purposes in their respective countries, meet on ad hoc basis prior to the end of 1980. The United States offered to host the meeting and asked that a steering group be formed of interested governmental parties to draw up the agenda and prepare the necessary technical work.

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The statement by Barbara Blum, Deputy Administrator of the U.S. Environmental Protection Agency, is added as Appendix 1.

Major countries at the Conference agreed, in principle and philosophy, that an Ad Hoc Consultation should be held as soon as possible.

The delegates at the OECD Conference underlined this statement endorsing that an Ad Hoc Consultation should in no way be perceived as a reason to delay other conclusions of the Conference.

A Steering Committee was formed that consisted of representatives from Belgium, Denmark, the Federal Republic of Germany, Finland, France, Italy, Japan, Luxembourg, the Netherlands, the Republic of Ireland, Sweden, the United Kingdom, the United States, and the Commission of European Communities. It became evident that three major elements had to be considered in order to put the commitment to international harmonization into practical and operational terms. They were:

(1) Identification of product noise measurement harmonization problems in all areas in which countries were actively regulating or anticipating future regulations.

(2) Agreement on the order of priorities among identified problems; which ones should receive attention first.

(3) Agreement on the most appropriate fora to use for the resolution of these problems.

It was decided to center the discussion on the needs for alignment procedures in construction equipment and domestic appliances. Based on the fact that consultation on measurement procedures in the fields of noise of motor vehicles, aircraft, and railways already took place between government representatives (i.e., Working Party 29/ECE, ICAO and I.R.C.A.), there appeared no necessity to discuss the appropriate forum for alignment of test procedures for these products.

The Ad Hoc International Meeting of Regulatory Officials on Alignment on Noise Test Procedures (Ad Hoc Consultation), which was open to all countries, not just members of OECD, met in Washington, D.C., December 9-12, 1980. The agenda was structured to provide all the delegates with a common information base prior to their deliberations on the needs for alignment procedures and for possible adequate fora that will contribute to the creation of alignment procedures, with emphasis on construction equipment and domestic appliances.

Prior to the Ad Hoc Consultation, the Secretariat, on behalf of the Steering Committee, sent a questionnaire to all countries that had been invited to participate. The purpose of the questionnaire was to collect information on product noise regulations and measuring procedures required by national legislation, either existing, under development, or anticipated within five years. This information formed the basis for review and discussion of the need for international alignment.

A draft Compendium of National Regulatory Actions was prepared from responses to the questionnaire. The information was presented in six product categories: Construction Equipment, Domestic Appliances, Miscellaneous, Railroads, Motor Vehicles, and Aircraft; and indicated that:

- 80 product types were identified, of which 47 have at least one existing regulation,
- 23 countries were identified as involved in the regulatory area with at least one regulation,
- 18 product types were identified in the construction equipment category of which 14 have at least one regulation, with 11 countries involved in this area with at least one regulation,
- 28 product types were identified in the domestic appliance area with 10 countries involved; however, much of the effort appears to be directed towards labeling for consumer information.

The draft Compendium was given to each participant at the December 1980 Ad Hoc Consultation, and the contents were discussed at the Meeting. All participating countries were requested by the Secretariat to review the Compendium and to provide information on any additions, deletions, or corrections.

A final version of the Compendium, entitled "National Regulatory Situations and Regulations Concerning Noise Source Emissions" was prepared. The Compendium and these Proceedings of the Ad Hoc Consultation form the basis for the agreed second consultation.

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The following governments and governmental bodies attended the Ad Hoc Consultation: Australia, Belgium, Canada, Denmark, the Federal Republic of Germany, France, Italy, Japan, Mexico, Norway, Portugal, Sweden, Switzerland, the Netherlands, the United Kingdom, the United States, and the European Economic Community (EEC).

Also in attendance as observers were representatives of the Organization for Economic Cooperation and Development (OECD), the International Standards Organization (ISO), the International Electrotechnical Commission (IEC), the International Civil Aviation Organization (ICAO), the General Agreements on Tariff and Trade (GATT), and Working Party 29 of the United Nations' Economic Commission for Europe (WP/29/ECE).

Ms. V. Simonsgard from Denmark and Mr. K. Eldred of the United States served as Technical Advisors to the Ad Hoc Consultation.

Appendix 2 contains the agenda for the Ad Hoc Consultation and the list of attendees.

Appendix 3 contains summarized welcoming addresses, statements, introductions and discussions of the participants of the Consultation.

Appendix 4 contains the Summary of Regulatory Information presented by Mr. Kenneth Eldred, Technical Advisor.

The conclusions below were agreed to by the Ad Hoc Consultation delegates.

GENERAL CONCLUSIONS OF THE AD HOC CONSULTATION

There is general agreement on the following conclusions:

1. The preliminary summary (Compendium) of regulatory

information by product type prepared by the U.S. Secretariat should be completed and circulated to all delegations for their use in examining alignment needs, and, for this purpose, all delegations are to provide their final material to the U.S. Secretariat by 31 January 1981.

2. Bilateral and/or multilateral discussions on questions of alignment of differences in test procedures have been useful in the past and may be of use in the future.
3. Regulatory officials should determine the requirements for test procedures for regulatory application and for the guidance of the technical experts who develop the detailed procedures, including where appropriate, the relevant international standardization body.
4. No new intergovernmental fora should be created for discussion and resolution of the alignment of test procedures.

CONCLUSIONS WITH REGARD TO CONSTRUCTION EQUIPMENT

There is general agreement on the following conclusions:

1. There are needs for alignment of test procedures for products that are subject to regulatory noise limits and also

of importance in trade, but that alignment should be accomplished without delaying regulations under development or otherwise impeding progress in reducing environmental noise.

2. As the priorities for alignment of test procedures for specific types of construction equipment were not determined at this meeting, they should be established on the basis of objective criteria using the following three-phased approach:

   a. Determine the regulatory situation for specific types of equipment by country or organization with respect to:

   (1) Existing regulations

   (2) Draft regulations

   (3) Plans for regulations

   (4) Possible future regulatory desires

   b. Determine the importance of trade for each specific type of equipment listed in (a) above.

c. Examine existing and draft regulations to determine if there are any differences between countries which should be examined in more detail, including scientific analysis and comparative testing, as appropriate.

3. Representatives of interested governments[1] should meet at some future date after there has been sufficient time for countries to study their needs for alignment and to circulate their proposed priorities to all participants and the U. S. Secretariat. The purpose of such a meeting will be to:

a. Determine the priorities based on individual country's proposals and the data obtained from the work described in conclusion 2a and 2b above.

b. Determine if the expertise available within the international standards organizations is necessary for the purpose of alignment.

c. Plan for any research required in accordance with conclusion 2c above.

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[1] "governments" includes EEC

The meeting accepted the offer of the United States to continue its role as Secretariat for the preparation of regulatory information until the next meeting is convened. The CEC was requested to agree to host[2] the next meeting at the behest of several EEC member states.

CONCLUSION ON DOMESTIC PRODUCTS

The countries should carefully review the material in the Domestic Appliance and Miscellaneous categories in the Regulatory Summary with a view towards improving the definitions of the categories and suggesting the products for which alignment is desired and in what priority.

[2] "host" includes providing facilities and attendant Secretariat services

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APPENDIX 1

Statement by U.S. Environmental Protection Agency Deputy Administrator, Barbara Blum, to OECD Conference on Noise Abatement Policies, May 9, 1980.

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OECD CONFERENCE ON NOISE ABATEMENT POLICIES

Statement by Barbara Blum,

Deputy Administrator, Environmental Protection Agency

for the United States, May 9, 1980

As the United States has stressed from the beginning of this Conference, we believe there is no more important goal before all of us here than to harmonize noise measurement procedures. We believe that such harmonization, as important as it is today, will only grow in significance in the immediate years ahead, particularly as more and more countries move to regulate major sources of noise.

This Conference has dramatically illustrated the fact that other nations share the concerns of the United States.

Several international organizations continue to do the majority of work in harmonization of measurement procedures. These organizatons must continue their excellent efforts. However, there are a number of specific policy questions which, as the discussions at this Conference point out, need to be resolved to speed up the harmonization work underway in the ECE, ISO, and IEC.

Therefore, the United States wishes to make a special proposal. In order to take advantage of the important contribution toward international cooperation and harmonization made by this Conference, I propose that officials who have policy responsibility for adoption of appropriate measurement procedures meet on an ad hoc basis as soon as possible. It is my hope that such an ad hoc meeting will be held by the end of this year and that it will focus on how best to advance the conclusions of this Conference on the harmonization of noise measurement procedures.

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I would like to propose that a group of interested parties who have responsibility for noise regulations join with the United States in forming a steering group to plan for this ad hoc meeting. The steering group should draw up the agenda for that meeting and prepare the necessary technical work to insure that full consideration is given to the important policy issues involved in harmonization of noise measurement procedures.

This steering group should keep in mind that the purpose of this ad hoc meeting is not to limit agreements that have already been reached among governments on harmonization. Rather, the purpose is to take additional steps toward harmonization of noise measurement procedures. Care must be taken, of course, to insure that this ad hoc meeting is in no way perceived as a reason to delay implementation of conclusion 27 of this OECD Conference.

Our purpose in calling for this ad hoc meeting is to bring together senior officials to focus on the significant policy issues involved in harmonization of measurement procedures. It is my firm belief that the ad hoc meeting we are proposing will significantly help to advance our common efforts to abate the noise pollution impacting all our communities by seeking agreement on future harmonization actions needed to be taken within the framework of existing organizations.

Among the important topics I would hope would be considered for discussion at the ad hoc meeting is harmonization of measurement procedures for:

-- product labeling

-- construction equipment

-- surface transportation

-- other machinery

-- consumer products.

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The United States would be happy to host this ad hoc meeting or would be happy to work with anyone else who would like to serve in this role.

I hope that others would join us in this initiative.

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APPENDIX 2

AGENDA FOR AD HOC CONSULTATION AND LIST OF ATTENDEES

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AGENDA AND GENERAL SCHEDULE

Tuesday, December 9th

9:00 am - 12:00 noon — Registration

3:00 pm - 6:00 pm

Session Chair:
United States
Henry Thomas

- Introduction
  (Henry Thomas-U.S.A.)
- Welcoming Address
  (Charles Elkins-U.S.A.)
- Policy Conclusions at OECD Conference
  (Ariel Alexandre-OECD)
- International Alignment
  (Jan Smeets-CEC)
- Possible Economic Implications of Nontariff Trade Barriers
  (Peter Williams-GATT)
- National Regulatory Information Introduced
  (Henry Thomas-U.S.A.)
- Period of Questions

Wednesday, December 10th

9:00 am - 12:00 noon

Session Chair:
Australia
Richard Langford

Presentation of National Regulatory Situations and Draft Regulations Concerning Noise Source Emissions:

- (K.M. Eldred-Technical Advisor)
- Test Procedures
- Administrative Procedures
- Application of Regulations (enforcement and conformity checks)

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AGENDA AND GENERAL SCHEDULE

Wednesday, December 10th (Cont)	• Possible Economic Implications Resulting from Disparities in Above Procedures
	BREAK (20 Minutes)
	Presentation of National Concern for the Alignment of Regulatory Test Procedures Developed Above Statements by Delegations
12:00 noon - 2:00 pm	Working Lunch
	International Standards-Their Relation to GATT (Olle Sturen-ISO)
2:30 pm - 6:00 pm	State of the Situation with Regard to International Procedures for Alignment of Test Procedures Concerning the Measurement of Sound Emissions in Five Sectors
Session Chair: Canada John Manuel	• Aircraft (D. Freer-ICAO)
	• Motor Vehicles (P. Rabar-ECE)
	• Construction Equipment (J.M. Junger-CEC)
	• Domestic Appliances (D.A. Steel-U.K.)
	BREAK (20 minutes)
	Elements of Procedures for Alignment of Test Procedures

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AGENDA AND GENERAL SCHEDULE

Wednesday, December 10th (Cont)	• Joint Development of Test Procedures for the Measurement of Noise (J. Karlsson-Sweden) • Mechanisms for Information Transfer (G. Fisher-Sweden) • Comparative Testing (H. Frenking-Fed. Rep. of Germany) • Role of the IEC (H. Diestel-IEC)
Thursday, December 11th	
9:00 am - 12:30 pm	Discussions of Needs for Alignment Procedures
Session Chair: Switzerland Gilbert Verdan	• Construction Equipment (A. Consoli-France)
Rapporteur: Norway N. Wedege	• Domestic Appliances (D.A. Steel-U.K.)
12:30 pm - 2:30 pm	Lunch Break
2:30 pm - 5:30 pm	Possible Adequate Fora Contributing to the Creation of Alignment Procedures (L. Reed - U.K.)
Session Chair: United Kingdom Leslie Reed	• Construction Equipment
Rapporteur: Belgium Jacques Dutry	BREAK (20 minutes) • Domestic Appliances

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AGENDA AND GENERAL SCHEDULE

Friday, December 12th

10:00 am - 12:30 pm	Reports of Rapporteurs and Formulation of Conclusions
Session Chair: Canada John Manuel	BREAK (20 minutes)
12:30 pm - 1:30 pm	Lunch Break
1:30 pm - 5:00 pm	Final Discussion of Conclusions
Session Cochair: U.S.A. and Canada	BREAK (20 minutes)
5:00 pm	ADJOURN

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PARTICIPANTS

AUSTRALIA

Richard L. Langford
Senior Noise Officer
Tasmanian Department of the Environment
Kirksway House, Kirksway Place
Hobart, Tasmania
AUSTRALIA 7000

Tel: (002)302770

BELGIUM

Jacques A. Dutry
Ingenieur Principal
Chef de Service
Ministere de L'emploi et du Travail
76 Bd Gendebien - 7000 Mons
BELGIUM

Tel: (065)333979

CANADA

John Manuel
Supervisor, Noise Pollution Control Section
Ontario Ministry of the Environment
135 St. Clair Avenue, West
Toronto
CANADA M4V 1P5

Tel: (416)965-1193
Telex: 06-23496

DENMARK

Gert Rojahn, Senior Engineer
Ministry of the Environment
National Agency of Environmental Protection
29, Strandgade
DK-1401 Copenhagen, K
DENMARK

Tel: (01)57 83 10
Telex: 31209

ORIGINAL ENGLISH

FEDERAL REPUBLIC OF GERMANY

Dr. Hubert J. Frenking
Consultant to the Federal Government
Graurheindorfer Strasse 198
D - 5300 Bonn 1
WEST GERMANY
Telex: (0228)681-1

Dr. Ansgar O. Vogel
Head of Noise Abatement Section
Bundesministerim des Innern
Graurheindorfer Strasse 198
D - 5300 Bonn 1
WEST GERMANY
Tel: (0228)681-1

FRANCE

Alfeo Consoli
Ingenieur
Ministere de L'Environnement et du Cadre de Vie
14, Boulevard du General Leclerc 92522
Neuilly/Seine
FRANCE
Tel: 758.12.12 Ext. 31-38
Telex: DENVIR 620602

Gerald de Montille
Chef Departement Environnement Acoustique
Laboratoire National D'Essais
1, rue Gaston Boissier 75015
Paris
FRANCE
Tel: (1)532.29.89
Telex: L.N.E. 202319 F

Pierre Woltner
Directeur - Adjoint de la Prevention des Pollutions
Ministere de L'Environnement et du Cadre de Vie
14, Boulevard du General Leclerc 92522
Neuilly/Seine
FRANCE
Tel: 758.12.12
Telex: DENVIR 620602 F

ORIGINAL ENGLISH

ITALY

Giovanni Cannelli
Researcher
National Research Council Institute
of Acoustics
Plaza Moro No. 7
00100, Rome
ITALY
Tel: 3765765

Marcello Nicoli
Engineer
Health Institute
c/o Instituto Superiore di Sanita
Roma, Via Regina Elena 299
ITALY
Tel: 4990
Telex: ISTISAN

Franco Magi
Environmental Coordinator
Ministry of State Industry
c/o ENI - Pzle Mattei 1
Rome
ITALY
Tel: 5900378

Umberto Ratti
Science Counsellor
Embassy of Italy
1601 Fuller Street, NW
Washington, DC 20008
Tel: 234-1935

JAPAN

Katsuya Sato
Second Secretary
Embassy of Japan
2520 Massachusetts Avenue, NW
Washington, DC 20008
Tel: 234-2266

ORIGINAL ENGLISH

MEXICO

Dr. A. Federico Groenewold
Head of Noise Control Department
Undersecretariat for Environmental Improvement
Ave. Chapultepec
284 - 2nd Floor
MEXICO 7, D.F.
Tel: 514-46-22

NORWAY

Nils P. Wedege
Head of Section
State Pollution Control Authority
P. O. Box 8100 DEP
05101
NORWAY
Tel: (02) 22 98 10

PORTUGAL

Pedro Martins Da Silva
Consultant
National Commission for the Environment
Praca Duque de Saldanha
31 - 3, 1096 Lisboa Codex
PORTUGAL
Tel: 544025
Telex: 18462- CNAMBI-P

SWEDEN

Jan E. Karlsson
Head of Subdivision for Noise
Swedish Environment Protection Board,
Technical Department
Box 1302, S - 17125, Solna
SWEDEN
Tel: (46)(0)8. 981800
Telex: 11131 ENVIRON S

SWITZERLAND

Dr. Gilbert A. Verdan
Head, Noise Abatement Division
Federal Office for the Protection of the
Environment
CH-3003 Bern
SWITZERLAND
Tel: 031/61 93 44
Telex: 33330 helv ch

THE NETHERLANDS

Mr. Oscar J. Grosch
Noise Abatement Office
Ministry of Health & Environmental
Protection
Dokter Reijersstraat 12
Postbus 439
2260 AK Leidschendam
HOLLAND
Tel: 070-209260
Telex: 32362 V M NL

R.B.J.C. van Noort
Director
Noise Abatement Office
Ministry of Health & Environmental
Protection
Dokter Reijersstraat 12
Postbus 439
2260 AK Leidschendam
HOLLAND
Tel: 070-209260
Telex: 32362 V M NL

F. J. Werring
Noise Abatement Office
Ministry of Health & Environmental
Protection
Dokter Reijersstraat 12
Postbus 439
2260 AK Leidschendam
HOLLAND
Tel: 070-209260
Telex: 32362 V M NL

UNITED KINGDOM

Alan R. Dove
H. M. Inspector of Factories
Health & Safety Executive
25 Chapel Street
London NW1 5DT
ENGLAND
Tel: 01 262 3277
Telex: 299950

ORIGINAL ENGLISH

Leslie E. Reed
Head of Air and Noise Division
Department of the Environment
Room 510, Becket House
Lambeth Palace Road
London SE1
ENGLAND

Tel: 01 211 7525
Telex: 22 221

David A. Steel
Department of Industry
Room 546, Ashdown House
123 Victoria Street
London SW1 6RB
ENGLAND

Tel: 01 212 5800
Telex: 8811074/S DTIHQ

UNITED STATES

Kenneth E. Feith
Chief, General Products Branch
Standards & Regulations Division (ANR-490)
Office of Noise Abatement and Control
U.S. Environmental Protection Agency
Washington, DC 20460
UNITED STATES

Tel: (703)557-7375

Donald L. Peyton
Executive Vice President
American National Standards Institute
1430 Broadway
New York, NY 10018
UNITED STATES

Tel: (212)354-3300

Henry E. Thomas
Director
Standards & Regulations Division (ANR-490)
Office of Noise Abatement and Control
U.S. Environmental Protection Agency
Washington, DC 20460
UNITED STATES

Tel: (703)557-7743

EEC

Erwan Y. Fouere
International Affairs Division
Environment and Consumer Protection Service
Commission of the European Communities
Rue de la Loi 200
B-1049 Brussels
BELGIUM

Tel: 02/735 0040
Telex: 21877 COMEU B

Jean-Marie Junger
Environment and Consumer Protection Service
Commission of the European Communities
Rue de la Loi 200
B-1049 Brussels
BELGIUM
Tel: 02/735 0040
Telex: 21877 COMEAU B

Dr. Jan Smeets
Head of Division
Environment and Consumer Protection Service
Commission of the European Communities
Rue de la Loi 200
B-1049 Brussels
BELGIUM
Tel: 02/735 0040
Telex: 21877 COMEAU B

Gisela Stodtmeister
Principal Administrator
Secretariat of the Council of the
European Communities
Rue de la Loi 170
Y-1040 Brussels
BELGIUM
Tel: 02/736 7900

OECD

Ariel R. Alexandre
Principal Administrator
Organization for Economic Cooperation
and Development
Environment Directorate
2, rue Andre-Pascal
75775 Paris Cedex 16
FRANCE
Tel: 502.12.20 (Ext.32.84)
Telex: 62160

ISO

Olle Sturen
Secretary General
International Organization for
Standardization
1, rue de Varembe
Case Potal tale 56
CH 1211 Geneve 20
SWITZERLAND

ORIGINAL ENGLISH

Avril Brenig
Technical Secretary
ISO/TC 108
Acoustical Society of America
335 East 45th Street
New York, NY 10017
UNITED STATES
Tel: (212)661-9077

Dr. Fritz H. Ingerslev
Chairman, ISO/TC 43
Lydteknisk Laboratory
Bldg. 352, Technical University of Denmark
DK 2800 Lyngby
DENMARK

Dr. Douglas Muster
Chairman, ISO/TC 108
4615 O'Meara Drive
Houston, TX 77035
UNITED STATES
Tel: (713)723-6849

Leif E. Nielsen
Technical Secretary
ISO/TC 43
Dansk Standardiseringsraad
Postbox 77, DK 2900
Hellerup
DENMARK
Tel: +45 1 62 93 15
Telex: 15615 DANSTA DK

IEC

Dr. Horst G. Diestel
International Electrotechnical Commission
1-3, rue de Varembe
CH 1211 Geneva 20
SWITZERLAND

ICAO

Duane W. Freer, Director
Air Navigation Bureau
International Civil Aviation Organization
P. O. Box 400
1000 Sherbrooke Street
Montreal
CANADA H3A 2R2

Tel: (514)285-8176

GATT

Peter J. Williams, Director
Technical Barriers Division
GATT
Rue de Lausanne 154
1211 Geneve 21
SWITZERLAND

Tel: (002)310231
Telex: 28787

ECE/WP - 29

Pal Rabar
Economic Affairs Official for U.N.E.C.E.
U. N. Economic Commission for Europe
Transport Division
Palais de Nations
Geneva
SWITZERLAND

TECHNICAL ADVISORS

Kenneth M. Eldred
P.O. Box 1037
Concord, MA 01742
UNITED STATES

Tel: (617)371-0099

Vibeke H. Simonsgaard
Blidahpark 40
DK 2900 Hellerup
DENMARK

Tel: 01 626 736

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APPENDIX 3

SUMMARIZED WELCOMING ADDRESSES, STATEMENTS, INTRODUCTIONS AND DISCUSSIONS OF THE PARTICIPANTS OF THE CONFERENCE

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This section contains a precis of each of the formal presentations on the agenda and summarizes the statements made about concerns in harmonizing noise measurement procedures.

WELCOMING ADDRESS:
MR. CHARLES ELKINS, USA

As Deputy Assistant Administrator for Noise Control Programs of the Environmental Protection Agency (EPA), Mr. Elkins welcomed the Ad Hoc Consultation and discussed the reasons for convening this meeting.

The idea for this Ad Hoc Consultation originated among members of the American delegation who attended the OECD Conference in May of 1980. The delegates were concerned that the OECD sessions might conclude only that the alignment of measurement procedures raised a number of questions. An additional meeting would be necessary to begin working out practical solutions.

As they considered how to approach the subject of measurement procedures, the American delegates first identified the three general noise sources of concern to all member countries: aircraft noise, motor vehicle noise, and noise from construction equipment and consumer products. Next, delegates looked at the international forums available to talk about these sources. Of the three sources, the first two receive some attention in international organizations. For example, ICAO has served in recent years as a forum for deliberation of the aircraft noise measurement procedures. Likewise, the alignment of measurement procedures for motor vehicles has been discussed by the WP 29 of the United Nations' ECE.

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However, in the area of construction equipment and consumer products, the potential problems and the means to address them have not received adequate attention by government regulatory officials. This area, therefore, is in greatest need of organized debate. Moreover, the lack of concurrence among alignment procedures for these products is shown to be an even more serious problem by the recent additions to the GATT treaty, which are designed to clear technical barriers to trade among countries.

At the OECD Conference, the principal participants agreed that the Ad Hoc Consultation for harmonization would be necessary and should occur quickly. They accepted the U.S. offer to host such a consultation and accepted the condition that the Consultation be run by an international steering committee and not be under the auspices of any single international organization. The discussion would focus on which products will be regulated in the future, what problems will arise in the alignment of measurement procedures, and how to resolve these problems. Further, the participants were to be noise regulatory officials who could speak with authority on these issues and who could develop the conference conclusions from this discussion.

POLICY CONCLUSIONS AT OECD CONFERENCE:
DR. ARIEL ALEXANDRE, OECD

Dr. Alexandre discussed the OECD Conference conclusions, which fell into three general categories:

1. Noise has increased over the past 20 years and will continue to increase.

2. The trend could be reversed with stronger noise abatement policies.

3. The single most important step to be taken would be to adopt stricter noise emission limits for motor vehicles.

In the first area, the noise increase in recent years has been substantial. For example, the acoustical energy generated in OECD countries has doubled since 1960. Fifteen percent of the people in these countries -- that is, 100 million people -- are now exposed to a 24-hour equivalent noise level greater than 65 dBA, which is generally considered as an unacceptably high level. Surveys show that noise is regarded as one of the most important factors affecting the quality of life and is often cited by city inhabitants as a reason for moving out of a neighborhood. In the future, noise is expected to increase in cities, spread to wider areas of the countryside, and extend over longer time periods. In the year 2000, according to the OECD forecast, 30 million more people will be exposed to noise of 65 dBA.

The second point made at the OECD Conference was that a wide range of policies could be implemented to reverse these trends. These policies include: regulations, economic incentives, and educational programs.

Noise regulations have already had some impact. Regulations have helped to stop the increase in airport noise, and some countries have set noise emission limits for motor vehicles. Unfortunately, the improvements achieved by regulations are slow, because regulations may not cover all machinery in use, machinery moved from one country to another is not always subject to corresponding regulations, and regulations require conscientious enforcement.

Economic incentives are needed to implement regulations. Thus, noise-makers could be charged a tax, or funds could be provided to finance noise protection.

For long-term improvement in noise levels, OECD recommends educational programs -- such as noise labeling on products, publicity campaigns, courses for school children, and training for engineers and designers.

The third conclusion of the OECD Conference was that the single most important measure to be implemented in the future would be stricter noise emission limits on motor vehicles. This measure would be significant because motor vehicles are the principal cause of noise increases and 85% of all motor vehicles are produced and used in OECD countries. Policy makers have recognized the fact that any policy in this area must harmonize limits in order to avoid nontariff barriers to trade. Accordingly, motor vehicle noise emission limits have already been harmonized in the Common Market and in the ECE. At the OECD Conference in May, the 24-member countries agreed that limits for motor vehicles should be reduced 5 to 10 dB effective 1985 to 1990. The OECD recommendation is believed to constitute an important step toward a more quiet environment.

INTERNATIONAL ALIGNMENT:
MR. JAN SMEETS, CEC

Mr. Smeets presented the Communities' perspective on alignment procedures and some of the implications for international collaboration on noise measurement.

The starting point for any constructive work in the area of international alignment procedures is to profit from the established procedures in

such fields as aircraft, motor vehicles, and railways. This experience will form a broad base for the problem fields, such as the noise of construction equipment and domestic appliances.

The response of national governments to noise emissions has been to limit the problem through legislation. Much of this legislation provides a framework for administrative establishment of specific regulations regarding noise emission limits or labeling, and control through type certification and conformity checks. The implementation of this legislation is usually assigned to existing legal and administrative structures. It is not surprising, therefore, that the legislation and administrative element governing a particular product will vary from country to country. To harmonize noise procedures, we need an appropriate international framework, an approximation, which does not lose sight of the original goal of environmental protection.

As regards noise procedures, the member states of the European Economic Community (EEC), which accepted the creation of a common market, set three objectives: a reduction of noise, a suppression of technical barriers to trade, and an avoidance of distortions in competition.

An action program on the environment was first proposed to the Commission of the European Communities (CEC) in 1972; this was approved in 1973 and amplified in 1977. When such a regulatory decision is made by the CEC, each member state is required to introduce it into its own legislation. Because of differences in national legislation, however, these decisions are not easily made and result from compromises -- particularly when economic aspects are involved. Of all the problems facing the Commission, those

concerned with improving the environment and those concerned with elimination of trade barriers are becoming more and more important.

The Ad Hoc Consultation represents one of the first international efforts at controlling the proliferation of standards in response to the non-tariff trade barrier agreements of the GATT, which take effect on January 1980. These recent measures, which have been added to the GATT, should help to clarify the principles already expressed in the GATT agreement of 1965. These principles include:

- Use of international standards whenever possible
- Circulation among countries of draft technical legislation and consideration of the resulting comments
- Seeking uniformity and compatibility of test procedures to avoid repetition of controls and unnecessary duplicative testing
- Technical assistance to developing countries

Some work that has already been accomplished in harmonizing international procedures is noteworthy, in particular that of the ICAO on aircraft noise and that of WP 29 on motor vehicles.

As this harmonization continues, the attempt to unify measurement methods will establish a common language. It will allow administrations to collect comparable scientific data, define the state of the art and establish technically feasible noise limits, help industry to follow one measurement method, and permit comparable economic evaluations. The main problem lies in the fact that many countries have already taken measures and will need to modify existing legislation.

Among the methods that may be used to create standards that do not hinder trade are the following:

- An exchange of information
- Common preparation of measurement methods
- Comparable tests and intercalibrations

These and other methods will be discussed at this Ad Hoc Consultation. The conclusions that the meeting reaches should improve the international collaboration that already exists and should allow a similar unification in the fields of construction equipment and domestic appliances.

COMMENTS BY MODERATOR:
MR. HENRY THOMAS, U.S.A.

In the past several years, collaboration among governments to harmonize test procedures has increased substantially. The reasons for this are clear when one talks with manufacturers and with government regulatory officials. It is necessary not only to improve the environment but also to limit barriers to trade.

The question may be raised: Why are noise officials interested in trade matters? The answer is that there are obstacles to reducing noise. Manufacturers face these problems when they apply engineering resources to reduce product noise. For any noise regulation, there are economic implications.

For the first time in recent years, efforts have been made to reduce trade barriers. Manufacturers have come to those of us in the regulatory field and complained of unnecessary testing that imposes a cost burden. When

we have identified procedures that do constitute barriers, we have found that these actions are not willing or malicious. Test methods were simply developed under one set of circumstances in one country and under a different set in another country.

In the balance between environmental benefits and trade barriers is a new element -- the multilateral trade negotiations in Geneva, which resulted in the General Agreements on Tariffs and Trade (GATT). The technical barriers issue has found its way into a formal treaty, and every government represented at this Ad Hoc Consultation has ascribed to this treaty.

POSSIBLE ECONOMIC IMPLICATIONS OF
NONTARIFF TRADE BARRIERS:
MR. PETER WILLIAMS, GATT

Mr. Williams provided a general introduction to the GATT treaty and explained some of the articles in the recent agreement that relate to technical barriers.

The GATT treaty, which is an international agreement, was set up in 1947. Today, 85 governments are members. The treaty's original aim was to provide stability and growth in the postwar period and to move toward a multilateral trading system. Specifically, it was designed to reduce barriers to trade.

The first GATT negotiations in 1947 reduced custom tariffs, and this activity continued as its main function into the 1960s. However, the treaty was also intended as a general code of conduct that would stabilize or do away with nontariff barriers. Accordingly, the treaty has always had a number of articles relevant to technical regulations.

The last round of traditional tariff negotiations in the 1960s reduced tariffs to a very low level -- averaging less than 6 to 8% of the value of imported goods. At this point, attention turned to more detailed discussions of nontariff measures and to the design of additional agreements to cover these measures. GATT officials began by asking governments to provide them with specifics of nontariff barriers. As a result, the Secretariat was able to draw up an inventory of 900 examples of nontariff measures.

Many of the nontariff measures -- over 100 of the 900 -- were technical barriers. These barriers could be classified according to the causes that appear to lie behind them. Among the causes are the following:

- Technical regulations are extremely complicated and therefore susceptible to misunderstanding.
- Regulations vary from country to country.
- Some requirements, which reflect specific domestic production processes, cannot easily be met by other countries.
- Test results are not always accepted from country to country.
- Regulations and certification systems may be adopted by national governments but also by subdivisions, such as the states in the U.S.A.
- Practices of some organizations discriminate against imports.

The writers of the GATT did not try to sort out solutions to individual problems. Instead, they drew up rules of general application that will leave technical aspects to existing international organizations in the standards field.

The agreement on technical barriers is founded on the premise that governments have a duty to protect the health and safety of their people and to protect the environment. But it also tries to ensure that technical

regulations, methods for testing, and certification systems do not create unnecessary obstacles to trade. It tries to guarantee that in the future regulators will take the needs of the traders into account.

The GATT agreement on technical barriers is one of 10 or more agreements drawn up in multilateral negotiations. It is an international treaty and is legally binding on all countries that have accepted it. It entered into force 1 January 1980, and 28 governments and the EEC have signed it so far. The agreement is open to all governments, not just to members of GATT.

Among the provisions of the agreement are the following:

- A government shall use international standards as a basis for technical regulations.
- Signatories shall play a full part in the work of international bodies.
- Parties shall accept test results of other parties in the agreement on the condition that they provide a sufficient means of determining conformity with technical regulations.

Signatories of the GATT treaty may invoke the dispute settlement procedures whenever necessary. However, the GATT Secretariat believes that the best method of ensuring compliance is to develop agreements that meet the needs of the signatories. The agreements are negotiated in the interests of all the parties, and it is therefore in their interest to abide by the agreements.

When disputes do exist, the traditional GATT method of settlement is to allow first for bilateral consultation. Next, a panel of three individuals is drawn from neutral governments, and this panel offers an independent assessment. The final remedy is a withdrawal of benefits -- from the government found to be contravening the agreement by the government that has been adversely affected -- but this step is taken only very rarely.

In conclusion, the GATT agreement does not limit the freedom of government to regulate; it establishes an obligation to remove unnecessary obstacles to international trade which these regulations may create.

DISCUSSION

The question was raised as to what extent the review procedure, by which the disputants may bring their questions to GATT, has been established. Mr. Williams explained that the procedures were laid down in the agreement. These procedures are based on traditional GATT procedures. If a complaint is made, GATT will be able to respond quickly. Thus far, no specific formal complaints have been raised.

Another question concerned the binding obligation of treaty signatories. Must they withhold implementation of a regulatory action that has been disputed by another country? In response, Mr. Williams made the point that disputes will only arise after a regulation has gone into effect. GATT does provide for a prior notification procedure. Governments drafting regulations may notify GATT if they believe the regulations will have an impact on trade. If another government comments on the draft regulation, the first government has an obligation to take those comments into consideration before implementation.

One delegate asked about GATT's role in providing a forum for discussion. Once prior notification of a regulation has been given to GATT, can GATT provide a forum for discussion of conflicting test procedures in order to affect alignment before the regulation is in place? Mr. Williams said that he believed that discussions should probably take place in organizations that

have technical competence in the area. GATT's Secretariat has not been established to deal with technical matters affecting a great multitude of products. GATT would be available, however, for discussion of problems of a more general nature.

PRESENTATION OF NATIONAL REGULATORY SITUATIONS AND DRAFT REGULATIONS CONCERNING NOISE EMISSIONS: MR. KENNETH ELDRED, TECHNICAL ADVISOR

As Technical Advisor to the Consultation, Mr. Eldred began by guiding the audience through the book containing the preliminary international survey of national regulations. In doing so, he explained the survey's organization and intent and pointed out areas where more information was needed.

The survey covered construction equipment, domestic appliances, miscellaneous noise sources, railroads, motor vehicles, and aircraft. The book starts with a cross-reference between products and the countries that have noise regulations governing these products. It also includes representative examples of regulations in the U.S. and other countries that have been enacted by a city or other political subdivision of the country. Summary sheets of the regulatory activity found thus far, distributed to the attendees, are reproduced as Appendix 4.

The preliminary results indicate that one or more countries have existing regulations covering 41 products, are developing regulations for 12 more products, and are planning to develop regulations for another 21 products. Thus, a preliminary total of 74 products has been identified as regulated or regulatory candidates.

The survey data help to describe the extent of regulation and the amount of harmony existing within each particular product area. For example, in the aircraft category, there are eight countries involved and 11 regulatory actions; however, the regulations are, for the most part, aligned through ICAO. In motor vehicles, 22 countries are involved and 85 actions. The preliminary total for all products/actions is 23 countries involved in one or more areas and 243 actions. The distributions indicate that the focus of activity has been in the motor vehicle area, an indication that is consistent with the conclusions of the OECD Conference.

The book itself provides a more detailed survey of noise regulations, specifying such elements as sound level, tolerance, descriptor, test procedure, acoustic field for test, and operating conditions. The survey also offers information on administrative procedures and each regulation's potential for being a trade barrier.

From the data obtained in the survey, conclusions can be drawn in four areas:

1. Test procedures
2. Administrative procedures
3. Enforcement
4. Economic implications

In the area of test procedures, two types of situations are evident. In the first situation, different test methods may be used to measure the same acoustic property of a product. Distance, or some other factor, may be different, but the operation of the product is the same in both methods. Here, the tests may produce data that can be related. In the second situation, the

difference in the tests goes beyond the methodology to the measurement of a different acoustic property, producing a systemic error, and here, the data often cannot be related to each other with sufficient error margin. In examining methods, therefore, one should look at both types of situations. Another point concerns the compatibility of the different primary descriptors used around the world. For example, with domestic appliances, the international procedure uses A-weighted sound power level; the U.S. uses average A-weighted sound level at a fixed distance. Although totally different in form, these two descriptors can be related to each other if the actual test procedures have sufficient similarity.

Administrative procedures determine the approval process with which the manufacturer must comply in order to get a product on the market. Two problems arise. One is that the procedure may constitute a trade barrier. The second is that the procedure may not relate to the objectives for which the product is tested. Type certification, for instance, may involve a complex, costly test performed once to define the precise acoustic characteristics of a product design, such as an aircraft. Production sampling tests, on the other hand, are usually simple and cheaper and are designed to be performed often, such as to check random samples of a product that may have variable sound levels. In developing standards for regulatory use, regulators should try to maximize the possibility of establishing a family of tests that cover the range of test purposes in a manner that will facilitate compatibility of data among the tests.

In the area of enforcement, the U.S. relies on self-certification by manufacturers who test their own products; however, manufacturers' equipment and tests may be checked by the EPA. Manufacturers also may be required to

test a large sample of a production under the Selective Enforcement Audit Procedure, and products are subject to recall for rework. In Europe, the principal method is a type test usually performed in a government-certified laboratory; further enforcement is typically made in the "in-use" environment. Similar in-use regulations exist in some states and cities within the U.S. but not on a national basis.

We are unable to obtain economic data that shows the magnitude of international exports, imports, and internal consumption by product and country. However, the potential relative importance of various products can begin to be seen by examining just one country (U.S.) for which we are able to get data. The data show that production of motor vehicles at $84 billion is almost eight times bigger than the next category, aircraft, at $11 billion. They show that we import some products in the motor vehicle category and that we are a major exporter of aircraft. Generally, the relative amounts of imports, exports, and production for internal consumption vary greatly by product within a category. Thus, to get meaningful data for assessing economic importance of regulations as potential barriers to trade, one must obtain data at the product level.

DISCUSSION

One delegate pointed out that information on local city governments should not be included in this collection of regulations. In Canada, for instance, large cities have their own regulations for construction equipment. For the purposes of this international meeting, we should confine to national standards and with trade barriers as they apply to national importation or exportation of equipment.

Agreeing with this comment, Mr. Eldred added that in the U.S. studies of regulations in cities and states have been taken. Attempts have been made to find the controlling regulation -- e.g., the regulation with the lowest noise level -- for each product. In cases in which a product is not regulated at the federal level, this regulation would become the de facto regulation for imports going into that state.

PRESENTATION OF NATIONAL CONCERNS FOR THE ALIGNMENT OF REGULATORY TEST PROCEDURES: STATEMENTS BY DELEGATIONS

THE NETHERLANDS: We are a densely populated country that views noise control as an urgent question of health and environmental protection. We have a short time schedule to implement our five-year noise abatement program. International consultation on measurement procedures should take place between governmental representatives, preferably under the auspices of the OECD. The exceptions are aircraft and motor vehicles, which are covered by ICAO and WP 29. Standards and technical groups can assist in the areas of expertise but cannot become the fora, since government must take the lead for health and environmental matters, and in some countries, industry dominates the standards groups. However, the need for consultation can be no reason for delaying implementation of the OECD conclusions or national noise policies.

MEXICO: Our noise control program was implemented in 1979 both to conserve the health and welfare of our people and to preserve their independence. We recognize the need for harmonization but not the need for uniformity of levels among all countries. We feel that it is important to establish

some minimum international level for noise of a product in international trade so that unusable noisy products are not sold to poor countries in Latin America, Asia, Africa, and India.

SWITZERLAND: The alignment of test procedures for all products for international trade is important and necessary. The choice between our own regulation or alignment with a foreign or international procedure, however, is difficult, because we must meet our own requirements and because scientific comparisons are not possible. Intensified international cooperation should not bar quick and justified legislation nor use of our own test procedures. Harmonization should be limited to products in international trade.

JAPAN: Noise abatement is one of the major fields in which appropriate actions should be taken urgently. It is important to seek harmonization of environmental policies when there are no valid reasons for differences. In particular, the harmonization of noise measurement methods should be prerequisite to that of environmental policies. We appreciate the work already accomplished by ICAO, ECE, ISO, IEC, and others, such as the Railway Congress Association. We hope that the countries participating in this Consultation will renew their support of and actively promote the activities of these organizations to seek the alignment of noise test procedures.

UNITED KINGDOM: The U.K. approach shows concern for the impact noise has on people. For problems of aircraft noise, we apply ICAO certification procedures, and for motor vehicles, we use the agreements reached both in the ECE and the CEC. For construction equipment, we are involved in the discussions on the preparation of a CEC directive. For domestic equipment, we see no need for noise emission limits.

Our main national legislation is under a Control of Pollution Act, which avoids the inflexibility of seeking emission limits at a national level for most products and which leaves local authorities free to prevent or mitigate the actual nuisance where it occurs. The local authorities have the responsibility to inspect the potential noise nuisances and to serve notice on offenders. The business or industry making the noise must show that they have taken all reasonable steps to control the noise. Legal interpretations prescribe what constitutes a reasonable step.

As regards occupational noise, the Health and Safety Work Act places a general duty on employers to insure that as far as is reasonably practicable, the health and safety of workers is protected. Machine builders must build safety features into their products and consider noise control at the design stage. Proposals are now being prepared for an all-embracing new regulation for noise at work.

FEDERAL REPUBLIC OF GERMANY: Germany is very much concerned with noise levels because of our dense population, industry, and heavy traffic. Our concern has expressed itself in all of the regulations we have already passed -- over 60 individual regulations. In our regulations, we try, as far as possible, to test the operating mode of a machine that is closest to its normal operation in use. We are concerned both with the repeatability of the test and with its economic impact on government and industry.

Although we feel that the government is responsible for noise control, we try to use our market economy mechanisms. We provide information to

the public about noisy products and about incentives for using equipment, and we try to have representative samples of quiet products in the marketplace. We hope that this meeting will provide an information exchange and will develop a concept about how scientific and technical differences between test procedures can be reduced and how these problems can be approached on a long-term basis. We stand ready to participate fully in the necessary scientific and technical investigations and comparative testing.

AUSTRALIA: Australia is a user nation importing from several different sources. Thus, we develop our own standards or judge products on the standards of their countries of origin. Also, our noise control is vested in the seven state governments, not at the federal level. The harmony we have achieved on a national basis stems from the formation of an environmental council made up of members from each state and a national association of testing laboratories that registers laboratories that meet appropriate technical requirements. We find that standards do not necessarily meet regulatory needs. To meet our needs, standards must clearly define how to measure the noise and how that noise is to be made, and they must have an acceptable degree of accuracy and repeatability. Only then are they capable of serving as the technical basis for regulations.

INTERNATIONAL STANDARDS --
THEIR RELATION TO GATT:
MR. OLLE STUREN, ISO

In recent years, governments and intergovernmental organizations have expressed increased interest in the activities of standardization. As a result, ISO has strengthened its liaison with the United Nations and the agencies of

the U.N. Of all the increased activity, nothing has received as much attention or raised so many questions as the GATT Standards Code.

The GATT code is directed to national governments, not to standards bodies. Standard bodies are involved only through government activities in the code. The GATT code imposes certain obligations on its signatories. Among these obligations are:

- International standards shall be used whenever possible.
- Governments shall play a full part in standards activities.
- Governments shall provide information and ensure that opportunity exists for inquiries from other governments concerning technical regulation.

These obligations and the rules around them will have an impact on international standardization in the future.

Several basic definitions are necesary to understand the GATT code. First, an international standard is a standard adopted by an international standardizing body. An international standardizing body has a membership that is open to the relevant bodies of at least all parties of the GATT agreement.

The ISO and IEC fulfill this criterion and ISO and IEC standards are international standards according to the code. However, although these organizations develop international standards, they do not have anything to do with the complaint that one government might have against another for not fulfilling the standards. This is a matter for GATT. To avoid reaching the complaint stage, every effort should be made to develop standards on as good a basis as possible.

This need, therefore, calls for national governments to play a role in standardization in organizations like the ISO. Participation can take a

number of forms. The first form is national input. Each national standards body represents a variety of interests: industry, government, consumers, and others. These parties should channel their interests through the national delegates to international meetings.

A second method of participation is through intergovernmental organizations that have working relationships with technical committees of the ISO. Consumer groups have sometimes found this method easier.

The third method is the possibility of consultation, either with a particular technical committee or with the Secretary-General. For instance, the ISO technical committee on quantities and units has had an advisory group for many years which had a big influence on work involving measurement and metrification. As an example of a consultation with the Secretary-General, representatives of multinational industries met with the Secretary-General once a year for several years in order to air their views. In the future, ISO will try to develop this possibility further.

In September 1980, ISO council requested that the Secretary-General study to what extent reference to standards has been made in national technical regulations. This request was based on a recommendation from the U.N. Economic Commission for Europe. The recommendation raises the problem of regulatory bodies vs. standards bodies. A standards body provides a technical basis that can be helpful in establishing regulations; it does not issue regulations.

Another common misunderstanding in this area is the misuse of the term "test method." A test method in itself does not give a requirement. The

test method can be used for a number of purposes -- one of which is to verify a requirement in a regulation.

The distinction is important, ISO establishes only certain types of requirements. To define the limitations and possibilities of ISO in this respect, ISO set up in 1970 a special group with representatives from industry, consumers, and government to draft an ISO policy for the preparation of international standards related to products. The result is a combined ISO/IEC policy concerning international standards. Copies of this policy are available for the audience.

Among other things, the policy recommends that requirements that could form part of a government regulation should receive priority in the preparation of a standard and should be published in a separate section to facilitate the implementation by governments of the principle of "reference to standards."

The policy also states that test methods corresponding to environmental regulations should be standardized internationally when appropriate, but not requirements.

There are presently some 6,000 International Standards available. Of this total, ISO accounts for more than 4,000.

In the years past, the solutions that we were seeking were national solutions. Increasingly, these solutions will be international. As service organizations, ISO and IEC will be part of the machinery that brings a new approach to future problems.

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ALIGNMENT OF PROCEDURES FOR MEASUREMENT
OF NOISE FROM AIRCRAFT:
MR. D. FREER, ICAO

The development and application of a world regulatory base for controlling aircraft noise began in the mid-1960s, when the introduction of jet aircraft, the increase in flights, and expanding air routes intensified the aircraft noise problem. At this time, civil aviation recognized the danger that, with no uniform approach to aircraft noise control, states would possibly begin taking disparate actions of their own to control noise.

World aviation conferences in the late 1960s concluded that states using air travel must jointly debate the growing nuisance of aircraft noise. The ICAO Council, ICAO's Montreal-based governing body, took the following actions:

- They called a world meeting on aircraft noise near airdromes, held in Montreal in 1970.
- They formulated Annex 16 to the Chicago Convention, a regulatory document written in 1944 that was the founding charter of ICAO.
- They assembled a world committee of experts, the Committee on Aircraft Noise (CAN), which has worked continuously since 1970.

CAN developed the amended version of Annex 16 that is the worldwide noise control agreement used today. ICAO is now in the forefront of world noise abatement and control. As evidence of ICAO's success, aircraft noise has been substantially abated, without commercial problems, and international aviation has continued to grow without decimation by disjointed national actions. ICAO has succeeded despite the larger number of flights and higher percentage of jet and jumbo jet aircraft in the world fleet today. World problems, such as the fossil fuel shortage, have provided incentive for

operations to get rid of fuel-inefficient aircraft that also cause excessive noise. Thus, the need for energy efficiency has aided ICAO's efforts to abate noise.

Because aviation is a world business, uniformity in standards and practices is needed so that international travel and sale of manufactured products can continue. Only a few manufacturers produce most of the world airline fleet, somewhat simplifying the task of regulation.

ICAO's process for developing regulations works as follows: In addition to distributing general information through a monthly publication and advisory circulars, ICAO's chief task is to develop two levels of regulations: (1) standards, which are necessary for safety, efficiency, and economy of flight, and (2) recommended practices, which are desirable practices that states are urged to follow if possible.

To determine what issues should be considered for regulation, groups of world experts decide whether the problems are mature enough for formal consideration by ICAO member states. The experts construct a technical base for political or institutional actions. Their reports are considered by ICAO's Air Navigation Commission, which may call a world meeting on the issue. From working papers, the Commission refines a proposal for action and sends it to the ICAO Council.

The Council sends the proposal for action to all member states. The states have 120 days to make comments, which are reviewed by the Air Navigation Commission and the Council. Two-thirds of all member states must ratify actions before they become regulations.

After this review process, when the Council adopts a standard or recommended practice, it immediately notifies all states of the new regulation. Unless the majority of states rejects it, the regulation goes on the books in about a year and becomes applicable six months after that.

Before the date of applicability, member states indicate how their national regulations will conform when the new regulation applies. States can file variances to world regulations. Differences from the new regulations are recorded in Montreal and disseminated to all states, so that every state knows what regulations are in effect in which states. Thus, the cycle of establishing a regulation is completed. Current regulatory problems being considered by ICAO include transporting dangerous goods by air and controlling aircraft engine emissions. These issues are undergoing the standard process of ICAO consideration.

ALIGNMENT OF PROCEDURES FOR MEASUREMENT
OF NOISE FROM MOTOR VEHICLES:
MR. PAL RABAR, ECE WP 29

WP 29, which covers the technical aspects of motor vehicle construction affecting road safety and the environment, established a Group of Rapporteurs, the GRB, to deal with regulations concerning noise. Participating in WP 29 are 20 to 25 European countries and as many international organizations representing the motor vehicle industry and its users. Contributing to the work of the GRB are 19 countries and 7 international organizations.

WP 29 and the GRB work by the following method. WP 29 has a detailed work program covering all important aspects of motor vehicle safety and environmental protection. WP 29 takes up all issues concerning motor vehicles and either considers them itself or refers them to a group of rapporteurs. In

either case, a representative of a participating country or an international organization prepares preliminary documents.

When a rapporteur group considers an issue, it prepares a document presenting the group's opinion on a given subject and submits the document to WP 29 for consideration. If the majority of countries and organizations represented in WP 29 accepts a document, it is considered approved. If not, it is returned with relevant comments to the rapporteur group that prepared it.

Documents approved by WP 29 are generally either (1) draft regulations or (2) draft recommendations. Draft regulations are annexes to the 1958 "Agreement Concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts." All regulations created by WP 29 are annexed to this basic agreement.

For a regulation to enter into force under the Agreement at least two countries must declare their willingness to apply it. Their governments submit the draft regulation to the U.N. Secretary General. The regulation becomes effective in the countries concerned five months after it is sent to the Secretary General. At their convenience, the other contracting parties to the 1958 agreement may indicate their intention of applying the regulation.

Draft recommendations are documents intended for inclusion in the consolidated resolution, a compendium of recommendations. Such a recommendation once approved by WP 29's parent body is communicated to all ECE countries. Regulations and recommendations are amended according to a well-defined procedure.

At present, 21 countries participate in the 1958 Agreement[1]. Thus far, 44 regulations have been annexed to the agreement. Several European countries not parties to the 1958 Agreement have indicated their unilateral acceptance of some of the regulations.

Concerning the ECE regulatory activity in noise abatement, a text prepared by the chairman of WP 29 and the chairman of the GRB for that session has been distributed. Regulation No. 9 is the most important regulation concerning noise. This regulation, effective 1969 and amended 1974, is in force currently in Belgium, Czechoslovakia, Finland, Hungary, Italy, Romania, Spain, and Yugoslavia.

To enforce stricter limits on motorcycle noise, in March 1978 WP 29 drew up new provisions, contained in a second noise regulation, Regulation No. 41. This regulation became effective June 1, 1980, and is currently applied in Czechoslovakia, Italy, and Spain. Regulation No. 41 imposes stricter limits than those of Regulation No. 9 on permissible sound levels for motorcycles, and it provides for certain changes in measurement of those levels.

Draft regulations also exist to provide lower limits and changes in the sound measurement method for vehicles with at least four wheels, including passenger cars, trucks, and buses. The provisions are designed to account more appropriately for actual driving conditions. These draft regulations will shortly be in force in Belgium and Spain. They will replace the corresponding ones of present Regulation No. 9.

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[1]Austria, Belgium, Czechoslovakia, France, Federal Republic of Germany, Hungary, Italy, Luxembourg, The Netherlands, Spain, Sweden, Switzerland, the U.K. Yugoslavia, German Democratic Republic, Norway, Finland, Denmark, Romania, Poland, and Portugal.

ORIGINAL ENGLISH

The following items appear on the work program of the rapporteur group for vehicle noise: new sound level limits, revision of noise measurement methods, harmonization of European and U.S. methods, moped noise, draft regulation on replacement of silencing systems sold by firms other than the vehicle manufacturer, control of vehicles in use, and noise inside vehicles. A rapporteur group on braking is dealing with pneumatic tire road noise.

Following is the status of noise limits:

- Mopeds -- no established limits (under study)
- Motorcycles - 1980 levels are already in force (no proposals for further limits)
- Passenger cars, trucks, and buses - the new levels will be in force at the end of 1981

Four methods of noise measurement are being considered by the GRB -- two German proposals, a French proposal, and a fourth method based on ISO draft No. 7188. After consolidating these methods, the rapporteur group decided to retain at least until 1990 the methods in the regulations already in force -- Reg. No. 9, Reg. No. 41, and the regulation on four-wheeled vehicles.

Future activities of the GRB will include preparation of proposals for new noise limits to be applied from 1985 to 1990; consideration of these proposals by WP 29; and study of a new measurement method, based on these proposals, to be applied from 1990. The above mentioned regulations are applicable only to new vehicles. The problem of the motor vehicle fleet as a whole remains. In this context, WP 29 has developed a set of recommendations urging an effective noise campaign with checks on conformity of production and appropriate maintenance and inspection of vehicles in use.

ORIGINAL ENGLISH

DISCUSSION

One delegate asked how issues are brought to the attention of WP 29. Is there a formal mechanism, or are concerns presented informally? Mr. Rabar explained that issues can be communicated by countries, organizations, or through a group of rapporteurs. Usually, a government will address a letter to the Secretariat of the ECE and request that he distribute a description of the issue to members of WP 29. Or, at a meeting of WP 29, the government can request that the issue be put on the next scheduled meeting.

In response to a question about the role and organization of builders in these groups of rapporteurs, Mr. Rabar said that efforts are always made to find a compromise between the interests of governments and those of industry. The opinions of industry are always taken into consideration.

Another delegate, referring to Regulation No. 9, asked if it would not be opportune to have separate regulations concerning measurement methods and limit values. Mr. Rabar replied that it is not in conformity with the 1958 Agreement to have regulations only on measurement methods. It is the work of standardizing organizations to draft guidelines; it is the duty of governments to establish performances.

ALIGNMENT OF PROCEDURES FOR MEASUREMENT
OF NOISE FROM CONSTRUCTION EQUIPMENT:
MR. J. M. JUNGER, CEC

Increased use of construction equipment and increased mechanical power caused public authority to make regulations limiting use and noise emissions. Such regulations have economic repercussions. Limiting sound emissions

is considered a kind of measurement. Therefore, national regulations can create trade barriers or distortions in competition within European communities.

Because member countries of the EEC began developing regulations for worksite equipment as early as the 1960s (the Federal Republic of Germany in 1965 and France in 1969), in 1973, EEC ministers adopted a program for the environment in which the Commission was to harmonize measures to reduce noise of worksite machines. Council ministers also expanded the program for eliminating trade barriers among Community members. Thus, in 1975 the Commission introduced the first draft directive on worksite machines.

In preparing draft directives, to avoid creating trade barriers, standardization of noise measurement methods was seen as a first step toward better technical understanding. Acoustic characteristics must be discussed in decibels, but the decibel is not a unit; it varies depending on how the physical quantities have been measured.

In preparing a Community proposal, EEC wanted a broad solution for dealing with legislation in a framework larger than the EEC. At high-level meetings, there was no time to consider problems of worksite noise. However, in 1975, the ISO Technical Committee 43 (TC 43) worked toward international standardization by preparing measurement methods to establish acoustic characteristics of worksite equipment.

Relations had to be established between the Community and ISO so that EEC solutions would be in harmony with those adopted at the world level. The ISO is a private organization. Its members are made up of national standards organizations, which are generally private or semi-public in nature.

Proposals prepared by the International Organization for Standardization (ISO) are voted on by members of the ISO Council. A standard approved in this framework constitutes only a recommendation for members of the committees; each committee is free to adopt a standard or not. A moral obligation exists to bear standards in mind, but to become binding, a standard must have a legal basis. Therefore, the contact of the EEC with ISO TC 43 increased after 1975, especially in the sector of construction equipment.

At this time, ISO/TC 43/SC 1/WG 6 began preparing measurement methods. The working group, called "Noise and Vibration of the European Communities," also began preparing a proposal for limiting noise, whichever measurement method was used. An ISO representative was invited to attend meetings. It was soon clear that the activities of WG 6 did not correspond entirely to the needs of the Commission group. Hence, Ms. Simonsgaard was entrusted by the Secretariat of TC43 to constitute a joint group, ISO-EC. This group developed an International Standard, ISO 4872, which defines measurement of noise emitted by construction equipment intended for outdoor use, particularly for determining compliance with noise limits.

Version B of this standard and Annex 1 of the EEC Directive are compatible. The CEC's goal is to give Version B of ISO 4872 a legal basis at the Community level. Through this joint effort, cooperation between TC 43 and the Commission's noise and vibration group was strengthened as far as CEC financial resources permitted, making a positive contribution to the common solution of problems.

ORIGINAL ENGLISH

In the process of reciprocal participation, each organization can keep in mind the other's needs and activities as they draft their standards and directives. Since 1975, the Commission has submitted to the Council several proposed draft directives, giving sound emission limits for: concrete compressors, power generators, welding generators, tower cranes, earthwork equipment such as bulldozers, loaders, shovels, and forklifts. Furthermore, the Commission drafted a proposal for sound measurement at the operator's position of worksite equipment. A joint group with delegates from ISO TC 43 and TC 127 and the Noise and Vibration group of the Commission met to develop a measurement for earthwork equipment. A result of this cooperation is the harmonized measurements described in draft International Standard ISO/DIS 6394.

For an ISO standard to have legal support, the Commission requires that the following conditions be satisfied. The standard must be an effective standard, not a draft. It must be identified by a reference number and date of adoption, and it must be used for protection of the environment. So that measurements will not be in doubt, there should be no alternative choices.

Although there is cooperation with the ISO, divergence of measurement exist at the world level. The difference between acoustic power and acoustic pressure is one example of a divergence that must be resolved. We should identify these differences and work to resolve them quickly, but no working group on construction equipment currently exists comparable to the WP 29 of ECE or ICAO.

ALIGNMENT OF PROCEDURES FOR MEASUREMENT
OF NOISE FROM DOMESTIC APPLIANCES:
MR. DAVID STEEL, UNITED KINGDOM

There are no truly international procedures for alignment of domestic appliance noise. The subject could be left with this simple statement, but one might also go on to make several other points.

On 1 January 1981, the General Agreement on Tariffs and Trade (GATT) will take effect, requiring that countries refer to international standards whenever possible and setting a number of other requirements. Many countries will find this a new experience -- similar perhaps to the traumatic experience of the U.K. when it became a member of the EEC. The experience of the U.K. working with the EEC on appliance noise may help other countries understand how international work might proceed in this area.

Under the Treaty of Rome, the Commission of the EEC works to improve the environment of the Community and to remove trade barriers. In the environmental area, the U.K. has a Control of Pollution Act, which allows the courts to decide what constitutes too much noise. However, another country in the EEC -- Germany -- normally relies on product certification to National Standards. Between these extremes of handling noise, the Commission tried to find a harmony or an approximation.

The first step was to define a domestic appliance. The EEC definition for this item is anything that is found in the home, garage, cellar or garden but no appliances built into the structure and not lawnmowers. In order

to progress beyond this point to some action, all governments in the EEC had to agree to some change. The easiest measure to be taken with regard to appliance noise is labeling. EEC, therefore, started with this. The general requirement is that appliances shall be labeled if the member state requires them to do so. Each country also has to forbid all non-complying labels, because if the methods of measurement are different, the labels will not be comparable and the consumer will be confused.

Having decided to label appliances, the EEC needed to find a method of measuring the noise. The Community agreed to base measurements on international standards, and ISO had a number of measurement methods from which to chose. Unfortunately, those requiring anechoic chambers or reverberant rooms were considered to be too expensive, and the ISO substitution method was not appropriate to domestic appliances without modification.

IEC then informed the EEC that they had a committee called TC 59 that writes performance requirements. Accordingly, IEC is currently producing a general method as a standard. With IEC's help, the EEC will go forward making use of a whole series of standards that will cover every appliance which generates significant noise.

A number of problems lie ahead. One is that when the EEC checked into the accuracy of existing measurement methods, the Community faced a lack of information. One ISO standard, for instance, listed a standard deviation of 4 dB, which for a national requirement could result in a total range of plus or minus 12 or 16 dB. Moreover, although a note to this standard

suggested that the reproducibility might be considerably better than this, nowhere was there any actual experimentation to support the quoted accuracy of the test method.

Another problem is that one of several values can be put on a noise label: an overall maximum, a mean value, a statistical maximum. Until legislatures get around to making legislation, no one conducts the vast amount of experimentation that is necessary to decide which of these three choices is the most meaningful to the consumer. The EEC, however, has requested that ISO's TC 43 write a statistical method for verifying the accuracy of labelled noise information. Thus, TC 43 has recently produced a final draft of sampling methods from which the EEC will be able to choose the most appropriate for each type of domestic appliance.

A final point is the way governments work through their national standards committees to put forward one combined view to international standards bodies. Recently, for instance, the U.S. introduced energy consumption labels based on new U.S. test methods, even though IEC standards already existed. The U.S. labels were not related to the international standard methods, and this was puzzling because the U.S. had originally contributed to the international standards. The reason, apparently, had to do with the government and the national standards committees not working sufficiently together on the same problem. If countries can put forward views, combining both government and other national interests to ISO and IEC, those organizations will be able

to produce more acceptable standards, and the GATT agreement will stand a better chance of working.

JOINT DEVELOPMENT OF PROCEDURES
FOR MEASURING NOISE:
MR. J. KARLSSON, SWEDEN

Although the need for joint development of test procedures and the advantages of such development are clear, the disadvantages or problems arising from joint development sometimes cause countries to use their own procedures. Therefore, this discussion concentrates on some difficulties of joint development. Three kinds of situations can cause problems.

One problem occurs when several test procedures exist for the same purpose, and field and laboratory studies do not favor any particular procedure. This situation can lead to long discussions that delay the establishment of regulations.

Another problem commonly occurs when several procedures exist but few studies have been carried out on them. To achieve joint development in this case, cooperation must start early -- before design of follow-up studies of the procedures begin -- to avoid debate about whether the study design was appropriate.

A third problem occurs when no test procedure is in use, and development must start from the beginning. This situation is rare but does occasionally arise. Although this problem may seem the easiest one to handle internationally, because of the time factor it is at least as difficult to develop joint test procedures in this case as in the others.

To stimulate discussion, Mr. Karlsson raised some questions about joint development. First, is there a need for different kinds of cooperation? Joint development may occur through existing international bodies, such as ISO, ICAO, and ECE. Alternatively, a few countries may get together to develop a common procedure. This process is quicker than using international agencies, especially if the countries involved have similar legal systems and other similarities. This method avoids many difficulties but does not reach the same number of countries as the first method.

Second, should we try to avoid having different international bodies handle the same subjects? Parallel work goes on in different international bodies today. For example, both ECE and ISO are developing test procedures for motor vehicle noise. Coordination among these bodies can prevent the development of two different test methods, but it will cause further delay.

These questions are both related to an important issue, the time factor, giving rise to a third question. Can we expect success in international work if we don't handle the time factor better? This time factor is perhaps the chief cause of difficulty in harmonizing test procedures.

A fourth question concerns fitness for use. How can we avoid having technically good test procedures that are not suitable for their purpose, the protection of the environment? Many procedures are technically perfect but can't be used in practical applications.

A similar difficulty occurs when administrative systems make using certain procedures impossible. Sometimes part of a procedure can be used, but

not always. The solution to this problem is not clear, but it should be discussed, because it is a reason for not using an international test method in accordance with the General Agreements on Tariffs and Trade (GATT).

Procedures used today are often developed by experts, for experts. In environmental protection, at least in Scandinavia, those who control the regulations are not experts on noise. They need simple, inexpensive test procedures. Again, the need arises for compromise between a practical method and a technically perfect one.

Often, because of the time factor, a test procedure is already in use in many countries before an international procedure is developed. How do we handle problems that arise when changing a test procedure? Trying to change to a new international procedure can cause many problems. For example, measurement methods for noise regulations of industries, airports, and roads affect land-use planning, because plans are formed according to data from the measurement method. A change in method may force plans to change, a costly procedure that makes further change difficult. Changing noise emission test procedures may force acceptance of higher levels in standards, even if in reality quieter products are available. This issue can sometimes cause political problems.

Finally, how do we define an international test procedure with respect to the GATT? Mr. Sturen addressed part of this question in his speech, suggesting that few international organizations for developing international test procedures exist in the field of noise test procedures. These organizations are ISO, IEC, and with respect to aircraft noise, the ICAO.

ORIGINAL ENGLISH

MECHANISMS FOR INFORMATION TRANSFER:
MR. GLENN FISHER, UNITED STATES

Observing how issues are perceived by different sides in international discussions, Mr. Fisher examined what factors make people perceive and decide as they go.

This meeting involves information -- and misinformation -- transfer. Misperception affects even the highest level of decision-making in relationships among nations, because information is used in different ways. Technical people have relatively little difficulty in agreeing on the nature of the issues, but moving from the technical to the political level of international problem-solving can be frustrating, because of the different perceptions of international issues.

International issues become like Rorschach ink blots, susceptible to different interpretations colored by each person's experience, ideas, and emotions. Decisions about an issue are affected by the conscious and unconscious ideas of the perceiver. The following factors govern different perceptions of international issues.

- Decision-makers reflect their own society's view of an issue. Noise for one culture may not be noise for another.
- The concept of regulation differs in different cultures. The decision-maker reflects political pressures from his own country about what regulations should be obeyed. For example, Americans assume that Germans believe in rules more than Americans do, and that Mexicans believe in them less than Americans do.

- The sense of bureaucratic organization is another culturally determined element of decision-making. Thus, information must be transmitted more explicitly, because organizations differ greatly in their bureaucratic structures and processes.

- Side issues such as size of budget, individual byplay, and bureaucratic infighting enter into the way decisions are made.

- Perception of role also affects decision-making. Counterparts with the same titles from different countries often have different degrees of responsibility, have been chosen for different talents, and are advanced by different rules.

- Styles in decision-making differ. For example, Japanese and American managers differ in the consensus by which they make decisions. Japanese firms reach consensus before decisions are made, while American managers make decisions and then work for consensus in implementing them.

- Styles of negotiation differ. In some traditions, a formal setting is a comforting forum for a formal declaration of what has already been decided privately. Confrontation is avoided. On the other hand, many Western cultures enjoy confrontation and debate. These cultural differences are potential sources of misunderstanding.

- Stereotypes of other cultures also affect decision-making. Memories of previous negotiations or feelings of dislike may shape decisions. Because they recognize differences in pattern, stereotypes of behavior may be useful in developing tactics for negotiations with different countries, but they may also cause inaccurate perceptions.

To be effective in the political realm, it is important to try to assess the degree to which one's own outlook is unique. More accurate perceptions and increased mutual understanding may not bring different parties closer to agreement, because they may come to recognize conflicting, irreconcilable interests. But misperception of another's position or motives can only cause havoc in international problem-solving.

ORIGINAL ENGLISH

A recommended goal for those in international interaction is to reduce misperception in information transfer. Avoiding misperception in the political realm requires explaining more, questioning more, and inquiring more about the other side's position than one might have if the issue of misperception were not explicitly raised.

COMPARATIVE TESTING:
MR. H. FRENKING, FEDERAL REPUBLIC OF GERMANY

When making comparisons to achieve harmonization to protect populations, one must know what background noise exists. Governments have issued legislation limiting machine noise emissions. If such legislation exists in some countries but not others, trade barriers are created. If these barriers are to be removed, we must consider the basis for regulations.

One precondition for harmonization of emission limits is to review and account for the scope of existing regulations. A further requirement is the harmonization of measuring procedures. Such procedures are necessary so that we can speak in the same terms, but harmonization will take a long time to achieve.

In comparing existing procedures, we should examine whether requirements can be met. It is useless to compare procedures that do not guarantee the use of existing national legislation, because national procedures are politically burdened. For example, work cycles of machines are regulated in some states.

In testing, machine operation should be regulated to create the same noise level that exists when the machine is in normal operation, because only such testing will be useful. An EEC directive states that when substituting operating procedures, machinery must always be operated under normal conditions. It is not enough to see that the same noise level is created in many cases. This point is very important when comparing measuring procedures from several countries.

The purpose of comparative testing in different countries should be:

- To obtain common bases by working out joint measuring procedures.
- To learn advantages or disadvantages of different methods by comparison of international procedures.
- To examine the validity of various procedures used for the same purpose, so that regulations have the same content (not the same sound level). Achieving the same content is difficult because of political implications.

The measurement descriptors used to express machinery emissions differ. These descriptors include noise level, sound level, sound power level, and directivity, among others. Such differences play a role in preventing comparative testing. We should agree on either the sound level or the sound power level as the primary descriptor of noise emission.

Sound power level is probably the one usable descriptor in the future for machinery noise emissions, because the value obtained becomes a sort of

labeling for machinery. Heated discussion occurs over 1 or 2 decibels. Regulatory requirements cause machinery manufacturers to make great efforts to achieve the required emission level, because ultimately this level will determine the marketability of the machinery. Therefore, the imports of measurement are considerable, and measuring instruments must be very precise. In physical terms, the one descriptor that comprises everything should be used. Achieving a uniform measurement descriptor would be a big step forward.

A second point is formation of a measuring value. Averaging the level is more or less accepted. The question of whether deviations are permitted is still open. For example, should maximum levels be taken in cruising vehicles because they are easily measured?

Another problem is the measuring field. In Europe, the measuring field is the hemisphere, represented by a cuboid. There are usually five measuring points on the side planes of the cuboid. These are the points closest to the sound source, representative of the whole plane. Therefore, we put them at the corners, and errors will equalize themselves. If we were to change the measurement configuration, previously agreed-upon levels, related to the direction of machinery noise, would often change. For the machinery designer, on the other hand, the main emission may be directed at points where real improvements in noise control are not shown by the measurements. So there are advantages and disadvantages in configuration.

The values of noise emissions can be easily measured according to the product, but a difficult point concerns the work cycle that must be maintained

during measurement. This point is still under discussion. I believe that in testing emissions, one should use the operating method of the country; the emission level of a fictitious operation is useless. Therefore, we must test the emissions created in normal operation. Gaps may exist here. For example, if you only measure engine noise after the engine has been housed, you will find that other parts of the machinery are also creating noise.

A final point concerns the validity of different test procedures. Are they of equal standing, so they can be recognized? Through comparative testing, we must ensure that equality is achieved not only in the total emissions, but also in the individual component emissions contributing to the total. Otherwise, deviations will exist in various phases, such as work cycle or configuration of measuring points. Total measurements may be comparable, but some machines may have different positions, in which case the same sum will not guarantee an accurate comparison.

ISO is an expert body whose services should be used more widely. ISO should make suggestions, and their proposals should be carefully examined to see what components can be incorporated into harmonized legislation for approval by various governments.

Three proposals for action are:

1. Greater scientific cooperation and exchange of information, perhaps through joint testing.
2. Comparative testing, after coordination of measurement modes.
3. Comparative testing not only of existing levels but as a form of basic research on the influence and characteristics of various quantities in different countries.

ORIGINAL ENGLISH

Only comparative testing will allow evaluation of whether something is of equal value. Unless governments realize that comparative testing is important for environmental testing, it will be difficult to achieve recognition from one country to the next. A worthwhile goal would be for all countries present to get together for comparative testing.

ACTIVITIES OF THE INTERNATIONAL STANDARDS ORGANIZATION TECHNICAL COMMITTEE 43: PROFESSOR INGERSLEV

For the measurement of the noise made by machines and equipment, the ISO has established a family of measurement procedures. These include four categories of varying degrees of sophistication and precision.

ISO standards are nearly useless if authorities do not use them. Fortunately, many of the ISO standards within acoustics are widely used for national standards. Most of the technical content related to measurements in Annex 16 of ICAO is copied from the relevant standards. Likewise, the work of WP 29 is based to a great extent on ISO standards.

When this Ad Hoc Consultation identifies the salient problems, the ISO is prepared to help. TC 43 in particular, should be a useful tool for this work. Thus far, TC 43 has worked to solve the problems of industry. In the future, the Committee should also be the standardization organization for problems of authorities.

TC 43 believes that noise abatement can be promoted using existing knowledge and standards. The participation of all parties in consultations such as this one should make it possible to prepare even better standards in the future.

ORIGINAL ENGLISH

THE ROLE OF THE INTERNATIONAL ELECTROTECHNICAL COMMISSION: MR. DIESTEL, IEC

As a sister organization to ISO, IEC issues standards on new sound level measurement devices, but the ISO works out how to use those standards.

Recently, IEC 651, a revision of an old standard for sound level meters, was published. A further draft for integrating sound level meters has not reached the stage of official selection. A document describing an instrument similar to the B&K sound exposure meter was issued as a central office document, but six countries were in favor of it and five were not, so it was sent back to the TC 59.

A question arises about how to test a sound level measuring device, so that you can say if it complies with IEC 651. From discussions of yesterday's meetings, it seems that this device has to measure everything.

The testing method should be further defined. Tests should be subdivided into a type test, carried out only once for an individual type, and another subdivision providing reference methods for the individual apparatus to be tested.

In each case, it should be possible to complete a test within half a day, or one.day at most. The National Bureau of Standards of the Federal Republic would be able to do such testing today, but only once for each step, because making too many measurements would be very costly.

The IEC proposes that in regulations it would be adequate to state that one type of approval had been made, and then to determine which additional requirements should be met.

The IEC hopes to be able to work closely with regulatory officials or hopes to be informed as soon as possible if standards are unreasonable. We don't want to promulgate standards that are not used by anyone. We want standards so precise and accurate that government regulations only have to refer to the standard.

DISCUSSION

The delegate from the Federal Republic of Germany made a clarification concerning the legal situation in that country. According to the prevailing law, anyone can operate construction machinery at any noise level, except when the noise creates a nuisance for the neighborhood. The limits are set forth in the government provision. The government has no emission values for domestic appliances.

Another delegate raised a question concerning the policies of WP 29. Once an issue has been raised, how are priorities established for addressing this issue? Mr. Rabar replied that the WP 29 follows a work program established 2 to 3 years in advance. However, as long as the majority of the group agrees, a proposal can obtain a higher priority.

A delegate asked Mr. Steel how long work had been in progress on domestic appliances and how many organizations are involved. Mr. Steel pointed out that the IEC has been working on these standards for at least 11 years.

Mr. Junger added that the first efforts to design an international standard for domestic appliances took place in 1976. A proposal is now being submitted to the IEC for commentary.

Addressing his question to the ISO and the IEC, one delegate asked how much time is typically required to establish a standard once a priority has been established. Speaking on behalf of ISO and IEC, Mr. Manuel, the moderator, estimated the average time to be 5 years.

What could be done, a delegate then asked, to expedite this process? Mr. Nielsen of the TC 43 responded by describing the well-defined procedure of the ISO for proposing a new work item. The possibility exists, though, for priorities to be set and for some work items to be handled as quickly as possible. One thing which may speed the process is discussing the problem with all the people involved in the particular subject area.

DISCUSSION

The discussion of needs for alignment procedures focused on construction equipment, domestic appliances, and possible adequate fora for creating alignment procedures. Each subject was first introduced by one of the delegates and then opened for discussion from the floor.

INTRODUCTION TO CONSTRUCTION PLANT AND EQUIPMENT:
MR. A. CONSOLI, FRANCE

The international harmonization of methodologies offers both advantages and disadvantages:

- advantages: comparison of plant and equipment manufactured in the various countries, ease with which information can be exchanged between countries.
- disadvantages: delays in the implementation of regulations, risk of finishing up with excessively simple methodologies for the sake of agreement.

ORIGINAL ENGLISH

Present situation regarding measurement methodologies

There are at present many measurement methodologies used as the basis for regulations. They vary markedly and are not comparable.

They may be drawn up either by a national government or by a group of countries (European Community).

Choice of measurement methodology

Since 1966, it has been French Government policy in regard to the control of noise from construction plant and equipment to introduce simultaneous regulations limiting the noise emitted by construction plant and restricting the noise emitted to the immediate vicinity of the site (type approval).

At the present time, the European Community is dealing solely with noise emissions from construction plant and equipment.

In both cases, the provisions laid down cover both the measurement methodology and the threshold limits of the noise.

In both cases, too, the choice of the measurement methods is based on the following criteria:

- the reproducibility of the method of measurement, this is fundamental;
- simplicity of the method, i.e., it must be simple but not over-simple;
- the cost of using the method bearing in mind that it will also have to be used for routine inspection tests.

The United States would appear to be moving towards measurement methodologies embracing families of plant or equipment.

There are doubtless other ways of tackling the problem.

The early part of this paper reviewed the advantages and disadvantages of the move to harmonize measurement methodologies and described the approach adopted in France, the European Community and the United States.

The basis for discussion within the Ad Hoc Group could be along the following lines:

(1) Are any attempts currently being made to harmonize the methods of measuring noise from construction plant and equipment?

(2) What would be the likely advantages and disadvantages of such an attempt?

(3) Would such a move bring about any improvement of the environment?

(4) Would it delay the progress of regulations now being drafted?

(5) Would such a move culminate in a methodology which was too general in scope (damaging) from an environmental protection point of view?

(6) What would be the preferred way of effecting harmonization (inter-State action, action by the European Community, at world level or by a "lateral" organization or body)?

(7) If an attempt is to be made to harmonize the methodologies of measurement what would be the best method (the French, the Community or the American approach, or some other approach)?

DISCUSSION OF CONSTRUCTION EQUIPMENT
RAPPORTEUR: MR. NILS WEDEGE, NORWAY

The main question that was raised during the discussion was whether there is a need for alignment procedures. Some delegates recognize that in terms of environmental protection, there isn't a need, and even doubted if there is one for commercial reasons.

Many of the delegates expressed feelings that regulations will lead to economic consequences, both at the national and international level. For that reason, it is necessary to take into consideration trade aspects from the beginning when planning to establish new regulations.

In some countries, one always tries to find out what trade consequences exist, before setting limits. In other countries, as in the United States, the government requires that investigations of health and welfare consequences be performed in conjunction with economic impact studies.

The GATT code makes such differences even stronger. One of the delegates pointed out that although he was in favor of alignment he was afraid that the procedure for alignment could cause delay. In his view, one should be careful not to align existing regulations, except when they are going to be revised. The necessity of finding out what is going to be regulated was pointed out more than once and, likewise, the need for establishing priorities.

Different views were expressed on how to establish priorities. One delegate proposed concentrating on such equipment for which there exists competing methods and that will be only a few.

It was also said that for selecting priorities, two criteria should be raised: first, the impact on the environment and second, anticipated barriers to trade.

One delegate proposed solving the problem of establishing priorities by using the available information to begin listing all the existing and draft regulations and to obtain from the various countries views on what they think might be regulated into the future. A second list could then be established on the basis of statistics on exports and trade. Comparison of the two lists would establish the priorities. The next step would be to see if there are different measuring methods and, if so, to determine how the differences can be removed. The delegate also offered that the necessary research could be performed by institutions in his country.

ORIGINAL ENGLISH

All the delegations appreciated the proposal, and several pointed out that much of the information was already available from the Secretariat for this meeting and that it had been collected from each participating country.

INTRODUCTION TO DOMESTIC APPLIANCES:
MR. DAVID STEEL, UNITED KINGDOM

The same problems exist for domestic appliances as for construction equipment. However, there are some additional points which should be considered. An important question for discussion will be: Who needs alignment of procedures? Is it manufacturers, consumers, or legislators? This meeting should separate the concepts of procedure which included certification and approval from measurement methods. Another question will be how to decide how much industry will benefit from harmonizing procedures, given the fact that safety and energy requirements are also major considerations in barriers to trade. We should cover not only legislation but also national "voluntary" practices. Labeling is an example of this latter aspect.

Noise from domestic appliances rarely threatens the environment, because these appliances are used indoors. Yard equipment, such as chain saws, are dealt with separately. Legislation on appliances, therefore, is basically a matter of consumer information, as is implicitly recognized by the widespread consideration given to labeling schemes rather than noise emission limits.

The approach in Japan is interesting. Any manufacturer may have his appliance tested in the government's laboratory, and if it complies with the predetermined noise level, he may then voluntarily label his product according

to the Japanese standard. If it does not comply, he may still sell the product but without the label.

There has been very good cooperation between The European Community and ISO TC 43, and we would all hope to see similar cooperation along these lines with other governments in the future.

There is a great need for legislatures to use simple procedures that give all an opportunity to make measurements which do not incur high costs. This will mean close collaboration by national committee and government representatives.

DISCUSSION OF DOMESTIC APPLIANCES
RAPPORTEUR: MR. NILS WEDEGE, NORWAY

During the discussion, one delegate said that only labeling is needed and that there is no need for alignment procedures because labeling will not establish trade barriers. He also proposed that guidelines should be excluded from the regulatory information provided for the meeting.

INTRODUCTION TO APPROPRIATE FORA:
MR. LESLIE REED, UNITED KINGDOM

The subject of the Consultation is procedures, and the question is whether the need for alignment should be accomplished bilaterally, multilaterally, in an existing agency or even, in some new forum. The following criteria can be used for selecting an appropriate forum:

- Whatever agency, whatever means we select, it must be responsive to the needs of government.
- Whatever the forum, it must act with a sense of urgency and be committed to working with regulatory agencies.

- The forum must have a sense of political commitment and the ability to compromise.
- It must have technical expertise.
- It must have adequate facilities for translation and for performing the duties of a secretariat.
- It must be very objective and completely nonpartisan.

Presumably, none of the delegates intend that we should create a new agency. Therefore, we should consider three existing possibilities: OECD, ECE, and a combined effort by ISO and IEC. The first two are governmental agencies that might lack technical expertise or funding: ISO and IEC are non-governmental bodies that might be subject to industry pressure and that have been criticized for the time it takes them to develop a standard.

DISCUSSION OF ADEQUATE FORA
RAPPORTEUR: MR. JACQUES DUTRY, BELGIUM

The discussion focused on adequate fora for the alignment of procedures related to measurement of noise from construction equipment. In general, the delegates felt that there was a need, in various degrees according to the country, to work toward alignment of measurement methods for sound emission from construction equipment. They emphasized that this attempt should not delay the on-going works and felt that no new international fora should be created to contribute to preparing this alignment.

They decided that a meeting of representatives of concerned governments should be held before the first of July, 1981, at a place which was not

yet specified. The objective of the meeting will first of all be to set priorities for construction equipment. Priorities will be established on the basis of a procedure that will be adopted unanimously.

The procedure will include the study of three documents: first, the regulatory information already assembled by the United States and updated with supplemental information which will be submitted to them by the different states before the 31st of January 1981; second, lists of equipment each country considers having priority, which will be submitted to the United States before the above-mentioned date; third, trade statistics for the different types of construction equipment considered in these lists.

Once these priorities are defined, the group should examine for each of these priorities to what extent there are true differences in measurement methodologies and in which way these possible differences can be reduced or eliminated.

The delegates agreed that these studies could be carried out, if necessary, by scientific institutes upon request of the governments, which, as much as possible, will be in contact with each other and will communicate results of these studies.

Bearing in mind the results of these activities, there will be for each priority defined as above, a study on alignment of methodologies; if necessary, the study on alignment will call upon technical assistance by appropriate technical fora such as ISO. Many delegates expressed confidence in the technical capability of ISO and IEC. However, several were concerned

that these organizations could be influenced by industry and thwart the will of governments in determining requirements for test procedures. Others felt that these difficulties could be overcome and cited the close cooperation in developing a test procedure achieved between the EEC and TC 43.

The group also wished to thank the representatives of the United States for agreeing to update the regulatory information and to put together the list of priorities proposed by the different countries.

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APPENDIX 4

SUMMARY OF REGULATORY INFORMATION

PRELIMINARY STATUS[1]

Summary of the Number of Specific Products by Highest Noise Regulations

	Number of Specific Products Identified			
	Existing Regulations	Regulations Under Development	Anticipated Regulations	Total[1]
Aircraft	2	1	—	3
Motor Vehicles	6	1	1	8
Railroad Equipment	2	—	—	2
Construction Equipment	14	3	1	18
Domestic Appliances[2]	12	2	14	28
Miscellaneous[2]	11	5	5	21
TOTALS	47	12	21	80

[1]Total identifies total number of specific products: highest regulatory status of a specific product is "existing regulation" if it exists, or next, "regulation under development" if it exists, or finally, "anticipated regulations."

[2]Many of these products are identified for labeling action.

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PRELIMINARY

Summary of Number of Countries[1] with Product Noise Regulating Activity

Product Area	Number of Countries with Regulating Activity by Highest Regulatory Status				Number of Regulatory Actions by Countries			
	Existing Regulations	Regulations Under Development	Anticipated Regulations	Total Involved	Existing Regulations	Regulations Under Development	Anticipated Regulations	Total Actions
Aircraft	8	—	—	8	8	3	—	11
Motor Vehicles	22	—	—	22	68	13	4	85
Railroad Equipment	2	1	—	3	4	2	—	6
Construction Equipment	9	2	—	11	26	17	6	49
Domestic Appliances[2]	6	3	1	10	19	8	25	52
Miscellaneous	9	2	—	11	21	9	10	40
TOTAL	23 countries involved in one or more areas							243

[1] For this summary, ICAO and EEC were counted as a country, and cities or states within a country were counted as a country when that country was not otherwise counted.

[2] Many of these involvements and actions are for labeling.

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